

**ARTICLE 3**  
**ELECTRIC SYSTEMS**  
**SUBARTICLE 1**  
**GENERAL PROVISIONS**

**103-300.** Authorization of Rules.

A. Sections 58-27-150 and 58-27-1910, Code of Laws of South Carolina, 1976, provides: "Rules and Regulations.--The Ecommission may make such rules and regulations not inconsistent with law as may be proper in the exercises of its power or in the performance of its duties under this Chapter, all of which shall have the force of law."

In accordance with the above provisions, the Public Service Commission has adopted the following rules and regulations and fixed the following standards for electric service, to become effective June 30, 1976. All previous rules or standards are hereby revoked, annulled, and superseded.

B. The adoption of these rules shall in no way preclude the Public Service Commission from altering, amending, or revoking them in whole or in part, or from requiring any other or additional service, equipment, facility, or standard, either upon complaint, or upon its own motion, or upon the application of any utility. Furthermore, these rules shall not in any way relieve either the Ecommission or the utilities of any duties under the laws of this State.

**103-301.** Application of Rules.

1. Jurisdiction. These rules shall apply to any person, firm, partnership, association, establishment or corporation (except municipalities or agents thereof, within their corporate limits, and any other exempt by South Carolina Statutes), which is now or may hereafter become engaged as an electric system as defined in 103-102(9), herein, in the business of furnishing electric current for domestic, commercial, or industrial customers within the State of South Carolina.

2. Purpose. The rules are intended to define good practice. They are intended to insure adequate and reasonable service. The electric systems shall assist the Ecommission in the implementation of these rules and regulations.

3. Waiver of Rules. In any case where compliance with any of these rules and regulations introduces unusual difficulty or where circumstances indicate that a waiver of one or more rules or regulations is otherwise appropriate, such rule or regulation may be waived by the Ecommission upon a finding by the Ecommission that such waiver is not contrary to the public interest.

## **103-302. Definitions.**

The following words and terms, when used in these rules and regulations, shall have the meaning indicated below.

1. Commission. The Public Service Commission of South Carolina.

2. Consolidated Political Subdivision. "The term 'consolidated political subdivision' means a consolidated political subdivision existing pursuant to the Constitution of this State, and shall not be deemed a city, town, county or other governmental unit merged thereinto."

~~Utility. Every privately owned corporation, firm or person furnishing or supplying electric service to the public, or any portion thereof, for compensation.~~

3. Customer. Any person, firm, association, establishment, partnership, or corporation, or any agency of the Federal, State or local government, being supplied with electric service by an electrical utility under the jurisdiction of this Commission.

~~4. Electrical Utility. "The term 'electrical utility' includes municipalities to the extent of their business, property, rates, transactions, and operations without the corporate limits of the municipality, or persons, associations, firms, establishments, partnerships and corporations, their lessees, assignees, trustees, receivers, or other successors in interest owning or operating in this State equipment or facilities for generating, transmitting, delivering or furnishing electricity for street, railway or other public uses or for the production of light, heat or power to or for the public for compensation; but it shall not include an electric cooperative or a consolidated political subdivision and shall not include a person, corporation or municipality furnishing electricity only to himself or itself, their resident employees or tenants when such current is not resold or used by others."~~

~~54. Electric Supplier. "The term 'electric supplier' means any electrical utility other than a municipality, and means any electric cooperative other than an electric cooperative engaged primarily in the business of furnishing electricity to other electric cooperatives for resale to other electric consumers, and any consolidated political subdivision owning or operating an electric plant or system for furnishing of electricity to the public for compensation."~~

5. Electric System. "The term 'electric system' means any electrical utility, electric supplier, utility, electric cooperative, public utility district, governmental body or agency, including consolidated political subdivisions, or another person or corporation supplying electric service to the public to the extent covered by the applicable Sections of the S. C. Code of Laws."

6. Electrical Utility. "The term 'electrical utility' includes municipalities to the extent of their business, property, rates, transactions, and operations without the corporate limits of the municipality, or persons, associations, firms, establishments, partnerships and corporations, their lessees, assignees, trustees, receivers, or other successors in interest owning or operating in this State equipment or facilities for generating, transmitting, delivering or furnishing electricity for street, railway or other public uses or for the production of light, heat or power to or for the public for compensation; but it shall not include an electric cooperative or a consolidated political subdivision and shall not include a person, corporation or municipality furnishing electricity only to himself or itself, their resident employees or tenants when such current is not resold or used by others."

67. Municipality. "The term 'municipality' when used in these Rules and Regulations includes a city, town, county, township and any other corporation existing, created or organized as a governmental unit under the Constitution or laws of this State except a 'Consolidated Political Subdivision'."

~~7. Consolidated Political Subdivision. "The term 'consolidated political subdivision' means a consolidated political subdivision existing pursuant to the Constitution of this State, and shall not be deemed a city, town, county or other governmental unit merged therein."~~

8. ORS. The Office of Regulatory Staff.

89. Rate. "The term 'rate' when used in these Rules and Regulations means and includes every compensation, charge, toll, rental and classification, or any of them, demanded, observed, charged, or collected by any electrical utility for any electric current or service offered by it to the public, and any rules, regulations, practices or contracts affecting any such compensation, charge, toll, rental or classification."

~~9. Electric System. "The term 'electric system' means any electrical utility, electric supplier, utility, electric cooperative, public utility district, governmental body or agency, including consolidated political subdivisions, or another person or corporation supplying electric service to the public to the extent covered by the applicable Sections of the S. C. Code of Laws."~~

10. Utility. Every privately-owned corporation, firm or person furnishing or supplying electric service to the public, or any portion thereof, for compensation.

**103-303. Authorization for Rates and Charges.**

A. No schedules of rates or contracts involving rates, under jurisdiction of the Commission, differing from approved tariffs or rates shall be changed until after the proposed change has been approved by the Commission.

B. All rates, tolls, charges, and contracts involving rates proposed to be put into effect by

any electrical utility shall be first approved by this Ecommission before they shall become effective, unless they are exempt from such approval by statute, order of ~~this~~ the Ecommission, or other provision of law.

C. No rates, tolls, charges nor service of any electrical utility under the regulation of this Ecommission shall be deemed approved nor consented to by mere filing of schedules or other evidence thereof in the offices of the Ecommission, unless such proposed adjustment is made in accordance with tariff provisions which have previously been approved by the Commission.

D. Any change in rates or charges affecting classifications of rates and services by electric cooperatives shall be provided to the ORS and filed with the Ecommission and subject to approval in accordance with S. C. Code Ann., § 58-27-840.

#### **103-304. Territory and Certificates.**

No electrical utility supplying electric service to the public shall hereafter begin the construction or operation of any electric facilities, or of any extension thereof, without first obtaining from the Ecommission a certificate that public convenience and necessity requires or will require such construction or operation; such certificate to be granted only after notice to the ORS, other interested electric systems and to the public, and after due hearing; provided, however, that this regulation shall not be construed to require any such electrical utility to secure a certificate for any extension within a municipality or district within which it has heretofore lawfully commenced operations, or for an extension within or to territory already served by it, necessary in the ordinary course of its business, or for an extension into territory contiguous to that already occupied by it and not receiving similar service from another electrical utility, but if any electric system in constructing or extending its lines, plant or system unreasonably interferes, or is about to unreasonably interfere, with the service or the system of any other electric system, the Ecommission may make such order and prescribe such terms and conditions in harmony with this regulation as are just and reasonable.

1. Rural Territorial Act. The Ecommission has assigned all areas outside municipal limits, and more than 300 feet from the lines (as defined in Section 58-27-610(3) of the South Carolina Code of Laws), as such lines existed on the dates of assignments, of any electric supplier (except some territory which was left unassigned to any supplier), and no electric supplier shall construct lines and equipment except as provided by S.C. Code of Laws, Sections 58-27-620(2); 58-27-620(4); 58-27-620(6); 58-27-650; and 58-27-660(1), into territory assigned to another supplier without prior approval of the Ecommission; and no electric supplier shall construct permanent lines and equipment into any territory left unassigned by the Ecommission pursuant to S.C. Code Ann., Section 58-27-640 without prior notice to the Ecommission and the ORS filed within a reasonable period of time prior to the date of actual construction of permanent lines, which notice shall include a map of the area showing existing facilities, location of the customer, and the proposed route of the permanent line, and a written certification that those electric suppliers furnishing electric service in any areas contiguous to the unassigned territory have been

provided a copy of the notice of construction of facilities as filed with the €commission and provided to the ORS, and all such facilities providing electric service shall be constructed in accordance with good utility practices and all other applicable provisions of the S.C. Code of Laws, as amended.

2. Utility Facility Siting and Environmental Protection Act. No electric system subject to the jurisdiction of ~~this~~ the €commission shall begin the construction and/or operation of any transmission line with a designed voltage of 125 KV or more or the construction and/or operation of a generating station of more than 75 megawatts, except a hydroelectric generating facility, before receiving a certificate of Environmental Compatibility and Public Convenience and Necessity in accordance with Sections 58-33-10 et seq., of the Code of Laws of South Carolina, 1976.

#### **103-305. Utilities Rules and Regulations.**

Each electrical utility shall adopt Rules, Regulations, Practices, Service Requirements, Terms and Conditions, etc., as may be necessary in the operation of such utility which shall be ~~filed with~~ provided to the ORS and subject to review and order of the €commission, unless otherwise specified.

### **SUBARTICLE 2**

#### **RECORDS AND REPORTS**

##### **103-310. Location of Records and Reports.**

All records required by these rules, or necessary for the administration thereof, shall be kept within this State, unless otherwise authorized by the €commission. These records shall be available for examination by the €commission or its authorized representatives at all reasonable hours.

##### **103-311. Retention of Records.**

Unless otherwise specified by the €commission or by regulation, or €commission Order governing specific activities, all records required by these Rules and Regulations shall be preserved for two years.

##### **103-312. Data to be Filed with the €commission and Provided to the ORS.**

1. Annual Report. Each electrical utility operating in this State shall file an Annual Report with the €commission and the ORS giving such information as the €commission may direct.

2. Current Information and Documents. The electrical utility shall file with the €commission and provide to the ORS the following documents and information.

A. Tariff

1. A copy of each electric system's schedule of rates and charges for service, together with applicable riders.
2. A copy of each electric system's Rules and Regulations, or Terms and Conditions describing each electric system's policies and practices in rendering service. These rules shall include a listing of available voltages and service characteristics.
3. Tariffs must be filed with the office of the chief clerk of the Commission and, on that same day, provided to the Executive Director of the ORS.

#### B. Customer Bill

A copy of each type of bill form used in billing for electric service.

#### C. Operating Area Map

1. Suitable maps and "one-line diagrams" shall be kept on file with the Commission and the ORS showing the size, character and location of each main transmission circuit and generating stations and main substations.
2. When an application for a Certificate of Convenience and Necessity is made by an electrical utility, a section of map showing the proposed line extension shall accompany such application.

#### D. Authorized Representative

The electrical utility shall advise the Commission and the ORS the name, address and telephone number of the person, or persons, to be contacted in connection with:

- a. General management duties.
- b. Customer relations (complaints).
- c. Engineering and/or Operations.
- d. Meter tests and repairs.
- e. Emergencies during non-office hours.

#### E. Contract Forms

A copy of the electrical utility's electric power contract form, and special electric power contract forms for customer service.

#### **103-313. Inspection of Utility Plant.**

A. Each utility shall, upon request of the ~~Commission~~ or the ORS, ~~provide the ORS with file with the Commission~~ a statement regarding the condition and adequacy of its plant, equipment, facilities and service in such form as the ~~Commission~~ or the ORS may require.

B. Each utility shall keep sufficient records to give evidence of compliance with its inspection programs as set forth in subarticles 5 and 6 of these rules and regulations.

#### **103-314. Interruption of Service.**

Each electrical utility shall keep a record of any condition resulting in any interruption of service affecting its entire system or major division thereof, or any major community, or an important division of such a community, including a statement of the time, duration, and cause of any such interruption. The Commission and the ORS ~~is~~ are to be notified of any such interruptions as soon as practicable after it comes to the attention of the utility and a complete report made to the ~~Commission~~ and the ORS after restoration of service if such interruption is for more than six hours duration.

#### **103-315. Accidents.**

Each electrical utility shall, as soon as possible, report to the ~~Commission~~ ORS each accident happening in connection with the operation of its property, facilities, or service, wherein any person shall have been killed or seriously injured or whereby any ~~serious~~ property damage in excess of \$5,000 shall have been caused. Such first report shall later be supplemented within 30 days by as full a statement as is possible of the cause and details of the accident and the precautions, if any, which have been taken to prevent similar accidents. After the electrical utility conducts its investigation, if it finds that the property damage does not exceed \$5,000, the electrical utility shall notify the affected customer of its findings in writing by certified mail. This notification shall inform the customer that the electrical utility has not reported the incident to the Office of Regulatory Staff because its investigation concluded that the property damage from the accident did not exceed \$5,000. Further, the notification shall inform the customer that if the customer disagrees with the electric utility's findings that the customer can file a written complaint with the commission and provide a copy of the complaint to the ORS. The electrical utility shall include the commission's name and address and the ORS's name and address in the notice to the customer.

#### **103-316. Complaints.**

Complaints concerning the charges, practices, facilities, or services of the utility shall be investigated promptly and thoroughly. Each electric utility shall keep a record of all such complaints received, which record shall show the name and address of the complainant, the date and character of the complaint, and the adjustment or disposal made thereof.

#### **103-317. Meter History Records.**

Each electrical utility shall maintain records of the following data, where applicable, for each billing meter for so long as such meter is in possession of the utility and for twelve months thereafter.

- a. Date of Purchase.
- b. The complete identification-manufacturer, number, type, size, capacity, multiplier and/or constants.
- c. The dates of installation and removal from service, together with the location, unless otherwise directed by the Commission.

**103-318. Meter, Test, Records and Reports.**

Each electrical utility shall maintain records of tests made of any billing meter. The record of the meter test shall be maintained for a minimum of three years after the meter's retirement. Test records shall include the following:

- a. The date and reason for the test.
- b. The reading of the billing meter before making any test.
- c. The accuracy "as found" at "Light Load" and at "Full Load", or "Test Amperes".
- d. The accuracy "as left" at "Light Load" and at "Full Load", or "Test Amperes".
- e. In the event test of the billing meter is made by using a standard meter or rotating standard the electrical utility shall retain all data taken at the time of the test in sufficiently complete form to permit the convenient checking of the test methods and the calculations.

### **SUBARTICLE 3**

#### **METERS**

**103-320. Meter Requirements.**

Service shall be measured by meters furnished by the electrical utility unless otherwise ordered by the Commission, and such meters shall maintain the degree of accuracy as set forth in 103-123.

**103-321. Meter Reading.**

Unless extenuating circumstances prevent, meters shall be read and bills rendered on a monthly basis not less than 28 days nor more than 34 days.

**103-322. Meter Reading Sheets or Cards.**



The Meter Reading Sheets or Cards shall show:

- a. Customer's name, service address and rate schedule designation.
- b. Identifying number and/or description of the meter(s).
- c. Meter readings.
- d. If the reading has been estimated.
- e. Location of meter or special reading instructions (if not possible, this information shall show on instructional cards).

**103-323. Meter Accuracy and Condition.**

A. Creeping: No watt-hour meter which registers on "no load" when the applied voltage is less than one hundred and ten (110) percent of standard service voltage shall be placed in service or allowed to remain in service.

B. No watt-hour meter shall be placed in service which is in any way mechanically defective, or which has incorrect constants or which has not been tested individually or under a sample meter testing plan approved by the Commission for accuracy of measurements and adjusted, as specified in 103-373(2), if necessary, to meet these requirements:

Average error not over 0.5% plus or minus;

Error at "Full Load" (test amperes) not over 0.5% plus or minus;

Error at "Light Load" not over 1.0% plus or minus.

**103-324. Meter Seal.**

Immediately after the pre-installation or field test of a meter, the manufacturer or the electrical utility shall affix a seal in order to avoid tampering. The meter installation shall be sealed to help prevent tampering or theft of current.

**103-325. Location of Meters.**

A. No customer's meter shall be installed in any location where it may be unreasonably exposed to damage, or in any unduly dirty, or inaccessible location.

B. Outdoor meters shall be used where practicable. Meters should not be placed on any unstable supports subject to vibration or tilting in excess of 4 degrees and should be free of obstruction for a distance of three feet in front of the meter and with sufficient space

below the meter to allow the use of proper test facilities.

C. Meters should be easily accessible for reading, testing and making necessary repairs and adjustments, and where more than one meter is installed at one location, sufficient space shall be allowed between and in front of meters to facilitate repairs and tests. Each customer shall tag or mark each "house" loop to indicate circuit metered.

D. Each customer shall provide and maintain at his expense a suitable and convenient place for the location of meters, where they will be readily accessible at any reasonable hour for the purpose of reading, testing, repairing, etc., and such other appliances owned by the electrical utility and placed on the premises of the customers shall be so placed as to be readily accessible at such times as are necessary, and the authorized agent of the electrical utility shall have authority to visit such meters and appurtenances at such times as are necessary in the conduct of the business of the electrical utility.

#### **103-326. Change in Character of Service.**

In order that the electrical utility may provide a proper service facility and metering installation, the customer shall advise the electrical utility of the expected service requirements, and shall also advise the electrical utility of any increase or decrease in the expected load to be provided by the electrical utility in sufficient time to change service characteristics.

#### **103-327. Master Metering.**

A. All service delivered to new multi-occupancy residential premises at which units of such premises are separately rented, leased or owned shall be delivered by an electrical utility on the basis of individual meter measurement for each dwelling.

B. Any exception to the provisions of paragraph A., supra, must be approved by the Commission upon its determination that individual metering to such premises is impractical and unreasonable.

C. Service to structures for which permits were issued or construction started prior to January 23, 1981, shall not be affected by the provisions contained herein.

D. Commercial premises with master metered service established prior to October 31, 1980, which are later converted to residential use shall not be affected by provisions contained herein.

### **SUBARTICLE 4**

### **CUSTOMER RELATIONS**

#### **103-330. Customer Information.**

Each electrical utility shall:

- a. Maintain up-to-date maps, plans, or records of its entire transmission and distribution systems, with such other information as may be necessary to enable the electrical utility to advise prospective customers, and others entitled to the information, as to the facilities available for serving customers within its operating area.
- b. Provide to each new residential and small commercial customer, within 60 days of application for service, a clear and concise explanation of the available rate schedules for the class of service for which the customer makes application for service.
- c. Provide to each residential and small commercial customer to whom more than one rate schedule is reasonably available a clear and concise summary of the existing rate schedules applicable to the customer's class of service at least once a year.
- d. Notify each affected customer of any proposed adjustment in rates and charges, excluding adjustment of base rates for fuel costs within sixty (60) days of the date of the filing of such adjustment or as otherwise directed by the ~~E~~commission.
- e. Provide to each customer, upon request, a clear and concise statement of the actual consumption of electrical energy by such customer for the previous twelve (12) months.
- f. Post a notice in a conspicuous place in each office of the electrical utility where applications for service are received, informing the public that copies of the rate schedules and rules relating to the service of the electrical utility, as filed with and approved by the ~~E~~commission, are available for inspection.
- g. Upon request, inform its customers as to the method of reading meters, as to billing procedures and shall assist customers in selecting the most economical rate schedule applicable and method of metering the service, except as otherwise provided for by the ~~E~~commission.
- h. Provide adequate means (telephone, etc.) whereby each customer can contract the electrical utility or its authorized representative at all hours in cases of emergency or unscheduled interruptions of service.
- i. Upon request, give its customers such information and assistance as is reasonable in order that customers may secure safe and efficient service.
- j. Notify any customer making a complaint recorded pursuant to 103-316 that the electrical utility is under the jurisdiction of the ~~E~~commission and the customer may notify the ~~Commission~~ ORS of his the complaint.

**103-331. Customer Deposits.**

A. Each electrical utility may require from any customer or from any prospective customer, a deposit intended to guarantee payment of bills for service, if any of the

following conditions exist:

1. The customer's past payment record to an electrical utility shows delinquent payment practice, i.e., customer has had two consecutive 30-day arrears, or more than two non-consecutive 30-day arrears in the past 24 months, or
2. A new customer cannot demonstrate that he is a satisfactory credit risk by appropriate means including, but not limited to, a letter of good credit from a reliable source, references which maybe quickly and inexpensively checked by the Company or cannot furnish an acceptable cosigner or guarantor on the same system within the State of South Carolina to guarantee payment, or
3. A customer has no deposit and presently is delinquent in payments, i.e., has had two consecutive 30-day arrears, or more than two non-consecutive 30-day arrears in the past 24 months, or
4. A customer has had his service terminated for non-payment or fraudulent use.

B. Each utility shall inform each prospective customer of the provisions contained in this rule.

**103-332. Amount of Deposits.**

A. A maximum deposit may be required up to an amount equal to an estimated two (2) months (60 days) bill for a new customer or a maximum deposit may be required up to an amount equal to the total actual bills of the highest two (2) consecutive months based on the experience of the preceding twelve (12) months or portion of the year, if on a seasonal basis.

B. All deposits may be subject to review based on the actual experience of the customer. The amount of the deposit may be adjusted upward or downward to reflect the actual billing experience and payment habits of the customer.

C. A schedule of deposits based upon an analysis of 60 days' usage for categories of customers falling within a specified range may be required by the electrical utility upon being provided to the ORS and filed and approved by the Commission.

D. Special offerings may be exempt as determined by the Commission; i.e., subdivision lighting, outdoor lighting, etc.

**103-333. Interest on Deposits.**

A. Simple interest on deposits at the current effective interest rate per annum prescribed by order of the Public Service Commission shall be paid by the electrical utility to each customer required to make such deposit for the time it is held by the electrical utility, provided that no interest need be paid unless the deposit is held longer than 6 months.

B. The interest shall be accrued annually and payment of such interest shall be made to the customer at least every two years and at the time the deposit is returned.

C. The deposit shall cease to draw interest on the date it is returned, on the date service is terminated, or on the date notice is sent to the customer's last known address that the deposit is no longer required.

#### **103-334. Deposit Records.**

Each electrical utility shall keep records to show:

- a. The name and address of each depositor.
- b. The amount and date of the deposit.
- c. Each transaction concerning the deposits.

#### **103-335. Deposit Receipt.**

Each electrical utility shall issue a receipt of deposit to each customer from whom a deposit is received, and shall provide means whereby a customer may establish his claim if his receipt is lost.

#### **103-336. Deposit Retention.**

Deposit shall be refunded completely with interest after two years unless the customer has had two consecutive 30-day arrears, or more than two non-consecutive 30-day arrears, in the past 24 months.

#### **103-337. Unclaimed Deposits.**

A record of each unclaimed deposit must be maintained for at least ~~two~~ one years, during which time the electrical utility shall make a reasonable effort to return the deposit.

Unclaimed deposits, together with accrued interest, shall be turned over to the S. C. ~~Tax Commission~~ State Treasurer as prescribed by state law.

#### **103-338. Deposit Credit.**

Where a customer has been required to make a guarantee deposit, this shall not relieve the customer of the obligation to pay the service bills when due. Where such deposit has been made and service has been discontinued for reason of non-payment of bill, or otherwise, an electrical utility shall apply the deposit of such customer toward the discharge of such account and shall, as soon thereafter as practicable, refund the customer any excess of the deposit. If, however, the customer whose service has been disconnected for non-payment, pays the full amount billed within 72 hours after service has been

disconnected and applies for reconnection, the electrical utility may not charge an additional deposit except under the provisions of 103-132.

**103-339. Customer Billing.**

The electrical utility shall bill each customer as promptly as possible following the reading of his meter and render a receipt of payment upon request.

1. New Service. Meters shall be read at the initiation and termination of any service and billing shall be based thereon.

2. Bill Forms. The bill shall show:

a. The reading of the meter at the beginning and at the end of the period for which the bill is rendered.

b. The date on which the meter was read, and the date of billing and the latest date on which it may be paid without incurring a penalty, and the method of calculating such penalty.

c. The number and kind of units metered.

d. The applicable rate schedule, or identification of the applicable rate schedule. If the actual rates are not shown, the bill shall carry a statement to the effect that the applicable rate schedule will be furnished on request.

e. Any estimated usage shall be clearly marked with the word "estimate" or "estimated bill".

f. Any conversions from meter reading units to billing units or any information necessary to determine billing units from recording or other devices, or any other factors used in determining the bill. In lieu of such information on the bill, a statement must be on the bill advising that such information can be obtained by contacting the electrical utility's local office.

g. Amount for electrical usage (base rate).

h. Amount of fuel adjustment (per KWH and dollars and cents).

i. Amount of South Carolina Sales Tax (dollars and cents).

j. Total amount due.

k. Number of days for which bill is rendered.

3. Late Payment Charges. A maximum of one and one-half percent (1 and 1/2 %) may be

added to any unpaid balance not paid within 25 days of the billing date to cover the cost of collection and carrying accounts in arrears. This method of late-payment charge will be made in lieu of any other penalty.

4. Payment by Check. The Electrical Utility, at its option for good cause, may refuse to accept a check tendered as payment on a customer's account.

5. Charges for Discontinuance and Reconnection. Whenever service is turned off for violation of rules and regulations, nonpayment of bills, or fraudulent use of service, the electrical utility may make reasonable charges, to be approved by ~~this~~ the ~~C~~commission, for the cost incurred in discontinuing the service and reconnection and require payment for service billed and for service used which has not previously been billed.

6. Estimated Bills. Each electrical utility shall not send a customer an estimated bill, except for a good cause, where the meter could not be read or was improperly registering. In no instance will more than one estimated bill be rendered within a 60-day period, unless otherwise agreed to by the customer.

#### **103-340. Adjustment of Bills.**

If it is found that an electrical utility has directly or indirectly, by any device whatsoever, demanded, charged, collected or received from any customer a greater or lesser compensation for any service rendered or to be rendered by such electrical utility than that prescribed in the schedules of such electrical utility applicable thereto, then filed in the manner provided in Chapter 27 of Title 58 of the South Carolina Code of Laws; or if it is found that any customer has received or accepted any service from an electrical utility for a compensation greater or lesser than that prescribed in such schedules; or if, for any reason, billing error has resulted in a greater or lesser charge than that incurred by the customer for the actual service rendered, then the method of adjustment for such overcharge or undercharge shall be as provided by the following:

1. Fast or Slow Meters. If the overcharge or undercharge is the result of a fast or slow meter, then the method of compensation shall be as follows:

a. In case of a disputed account, involving the accuracy of a meter, such meter shall be tested upon request of the customer, as specified in 103-370(2).

b. In the event that the meter so tested is found to have an error in registration of more than two (2) per cent, the bills will be increased or decreased accordingly, but in no case shall such a correction be made for more than sixty (60) days.

2. Customer Willfully Overcharged. If the electrical utility has willfully overcharged any customer, except as provided for in 1 of this rule then the method of adjustment shall be as provided in the S. C. Code Ann., § 58-27-960, and §§ 58-27-2410 et seq. (1976).

3. Customer Inadvertently Overcharged. If the electrical utility has inadvertently

overcharged a customer as a result of a misapplied schedule, an error in reading the meter, a skipped meter reading, or any other human or machine error, except as provided in 1 of this rule, the electrical utility shall, at the customer's option, credit or refund the excess amount paid by that customer or credit the amount billed as provided by the following:

- a. If the interval during which the customer was overcharged can be determined, then the electrical utility shall credit or refund the excess amount charged during that entire interval provided that the applicable statute of limitations shall not be exceeded.
- b. If the interval during which the customer was overcharged cannot be determined then the electrical utility shall credit or refund the excess amount charged during the 12-month period preceding the date when the billing error was discovered.
- c. If the exact usage and/or demand incurred by the customer during the billing periods subject to adjustment cannot be determined, then the refund shall be based on an appropriate estimated usage and/or demand.

4. Customer Undercharged Due to Willfully Misleading Company. If the electrical utility has undercharged any customer as a result of a fraudulent or willfully misleading action of that customer, or any such action by any person (other than the employees or agents of the electrical utility), such as tampering with, or bypassing the meter when it is evident that such tampering or bypassing occurred during the residency of that customer, or if it is evident that a customer has knowledge of being undercharged without notifying the electrical utility as such, then notwithstanding 1 of this rule, the electrical utility shall recover the deficient amount provided as follows:

- a. If the interval during which the customer was undercharged can be determined, then the electrical utility shall collect the deficient amount incurred during that entire interval, provided that the applicable statute of limitations is not exceeded.
- b. If the interval during which the customer was undercharged cannot be determined, then the electrical utility shall collect the deficient amount incurred during the 12-month period preceding the date when the billing error was discovered by the electrical utility.
- c. If the usage and/or demand incurred by that customer during the billing periods subject to adjustment cannot be determined, then the adjustment shall be based on an appropriate estimated usage and/or demand.
- d. If the metering equipment has been removed or damaged, then the electrical utility shall collect the estimated cost of repairing and/or replacing such equipment.

5. Equal Payment Plans. An electrical utility may provide payment plans wherein the charge for each billing period is the estimated total annual bill divided by the number of billing periods prescribed by the plan. The difference between the actual and estimated annual bill is to be resolved by one payment at the end of the equal payment plan year,



unless otherwise approved by the Ecommission. However, any incorrect billing under equal payment plans shall be subject to this rule.

6. Customer Undercharged Due to Human or Machine Error. If the electrical utility has undercharged any customer as a result of a misapplied schedule, an error in reading the meter, a skipped meter reading, or any human or machine error, except as provided in 1 and 2 of this rule then the electrical utility may recover the deficient amount as provided as follows:

- a. If the interval during which a consumer having a demand of less than 50 KW was undercharged can be determined, then the electrical utility may collect the deficient amount incurred during that entire interval up to a maximum period of six months. For a consumer having a demand of 50 KW or greater, the maximum period shall be 12 months.
- b. If the interval during which a consumer was undercharged cannot be determined, then the electrical utility may collect the deficient amount incurred during the six-month period preceding the date when the billing error was discovered by the electrical utility. For a consumer having a demand of 50 KW or greater, the maximum period shall be 12 months.
- c. The customer shall be allowed to pay the deficient amount, in equal installments added to the regular monthly bills, over the same number of billing periods which occurred during the interval the customer was subject to pay the deficient amount.
- d. If the usage and/or demand incurred by that person during the billing periods subject to adjustment cannot be determined, then the adjustment shall be based on an appropriate estimated usage and/or demand.

### **103-341. Applications for Service.**

1. Method. Applications for service may be oral or in writing.
2. Obligation. The applicant shall, at the option of the electric system, be required to sign a service agreement or a contract. In the absence of such service agreement or contract, the accepted application shall constitute a contract between the electric system and the applicant, obligating the applicant to pay for service in accordance with the electric system's tariff or rate schedule currently on file with the Ecommission and the ORS, and to comply with the Ecommission's, and the Electric System's, Rules and Regulations Governing Service Supplied by the electrical utility.
3. Termination. When a customer desires to have his service terminated, he must notify the electrical utility; such notification may be oral or in writing. The electrical utility shall be allowed a reasonable period of time after the receipt of such a notice to take a final reading of the meter and to discontinue service.

### **103-342. Reasons For Denial or Discontinuance of Service.**

Unless otherwise stated, a customer shall be allowed a reasonable time in which to correct any discrepancy which may cause discontinued service. Service may be denied or discontinued for any of the following reasons:

- a. Without notice in the event of a condition determined by the electrical utility to be hazardous or dangerous.
- b. Without notice in the event of customer's use of equipment in such a manner as to adversely affect the electrical utility's service to others.
- c. Without notice in the event of unauthorized or fraudulent use, excluding tampering, of the utility's service, i.e.:

- 1. Misrepresentation of the customer's identity.
  - 2. For reconnection of service by customer who has had service discontinued for violation of and/or noncompliance with the Commission's 103-342 et seq.
- d. Tampering.

After the customer has applied for and/or received service from the electrical utility, he shall make every reasonable effort to prevent tampering with the meter and service drop serving his premises. A customer shall notify the electrical utility, as soon as possible, of any tampering with, damage to, or removal of any equipment.

Tampering with meters or with conductors carrying unmetered current and unauthorized breaking of utility's seals is prohibited by law and shall not be tolerated by the utility. Such meter tampering shall include but shall not be limited to, unassigned meters, altered meters, upside down meters, or the attachment to a meter or distribution wire of a device, mechanism or wire which would permit the use of unmetered electricity. Should the utility find that the meter, conductors, or seals have been tampered with, the utility shall give notice to the customer of possible discontinuance of service. Service maybe continued or reconnected consistent with the following:

- 1. A customer can stop discontinuance of service or have service reconnected by paying a reasonable charge for an inspection (to insure proper operating conditions), a reasonable reconnect fee, and charges to compensate for any damage to the utility's facilities.
- 2. A customer's bill may be adjusted to reflect normal usage should any tampering reflect other than normal meter readings and the customer's bill may include the establishment of a deposit in accordance with the Commission's 103-332 et seq.

Nothing herein shall prevent the electrical utility from instituting appropriate legal actions for violations and/or noncompliance with the Commission's 103-330 et seq.

e. For failure of the customer to fulfill his contractual obligations for service and/or facilities subject to regulation by the Commission.

f. For failure of the customer to permit the electrical utility reasonable access to its equipment.

g. For nonpayment of bill for service rendered provided that the electrical utility has made reasonable efforts to effect collection and has complied with the provisions of R. 103-352.

h. For failure of the customer to provide the electrical utility with a deposit as authorized by 103-331.

i. For failure of the customer to furnish permits, certificates, and rights-of-way, as necessary to obtaining service, or in the event such permissions are withdrawn or terminated.

j. For failure of the customer to comply with reasonable restrictions on the electrical utility's service, provided that notice has been given to the customer and that written notice has been furnished to the Commission and the ORS.

k. No electrical utility shall be required to furnish its service or to continue its service to any applicant who, at the time of such application, is indebted or any member of his household is indebted, under an undisputed bill to such electrical utility for service previously furnished such applicant or furnished any other member of the applicant's household. However, for the purposes of this regulation, the electrical utility may not consider any indebtedness which was incurred by the applicant or any member of his household more than six (6) years prior to the time of application.

l. The electrical utility may terminate a customer's service should the customer be in arrears on an account for service at another premise.

m. For the reason that the customer's use of the utility's service conflicts with, or violates orders, ordinances or laws of the State or any subdivision thereof, or of the Commission.

**103-343. Insufficient Reasons for Denying Service.**

The following shall not constitute cause for refusal of service to a present or prospective customer:

a. Nonpayment for services by a previous occupant of the premises to be served, unless such previous occupant shall benefit from such new service.

b. Failure to pay for merchandise purchased from the electrical utility.

**103-344. Right of Access.**

Authorized agents of the electrical utility shall have the right of access to premises supplied with electric service, at reasonable hours, for the purpose of reading meters, and for any other purpose which is proper and necessary in the conduct of the electrical utility's business. Such agents shall produce proper identification and shall inform the customer of the purpose of necessary access to occupied premises before entry except that agents performing meter reading tasks, shall produce such identification and information as to purpose only when requested.

**103-345. Customer Complaints.**

A. Complaints concerning the charges, practices, facilities, or service of the electrical utility shall be investigated promptly, thoroughly, and professionally. The electrical utility shall keep such records of customer complaints as will enable it to review and analyze its procedures and actions.

B. When the ~~Commission~~ ORS has notified the electrical utility that a complaint has been received concerning a specific account, the electrical utility shall refrain from discontinuing the service of that account until the ~~Commission's~~ ORS's investigation is completed and the results have been received by the electrical utility. Service shall not be discontinued if the complainant requests in writing a hearing before the commission.

**103-346. Rate Schedule, Rules and Regulations.**

Copies of all schedules of rates for service, forms of contracts for service, charges for service connections and of all rules and regulations covering the relations of customer and electrical utility, shall be provided to the ORS and the commission ~~filed~~ by each electrical utility and approved by the ~~E~~commission in the office of the ~~E~~commission. Complete schedule, contract forms, rules and regulations, etc., as filed with and approved by the ~~E~~commission, shall also be on file in the local offices of the electrical utility and shall be available for inspection by the public.

**103-347. System Which Utility Must Maintain.**

Each electrical utility, unless specifically relieved by the ~~E~~commission from such obligation, shall operate and maintain in a safe, efficient and proper condition all of the facilities and equipment used in connection with the regulation, measurement and electric service to any customer up to and including the point of delivery into the facilities owned by that customer.

**103-348. System Extensions.**

Each electric supplier shall be obligated to comply with all requests for service in

accordance with its schedules of rates and service rules and regulations on file with the Commission within areas assigned to it by the Commission and within 300 feet of its lines as they existed on the date of assignment.

**103-349. Replacement of Meters.**

Whenever a customer requests the replacement of an electric meter on his premises, such request shall be treated as a request for the test on such meter, and, as such, shall fall under the provisions of 103-373--Test Procedures and Accuracies.

**103-350. Service Entrance Changes.**

Whenever a customer requests the electrical utility to relocate the electrical utility's service entrance, the electrical utility may require reasonable charges to cover the cost incurred.

**103-351. Temporary Service.**

When the electrical utility renders temporary service to a customer, it may require that the customer bear all the cost of installing and removing the service in excess of any salvage realized.

**103-352. Procedures for Termination of Service.**

Prior to the termination of electric service pursuant to R.103-342 e.--m., the following procedures shall be employed by the electrical utility.

a. Not less than ten (10) days prior to termination of service, the electrical utility shall mail a notice of termination to the affected customer. The notice of termination of service shall include, as a minimum, the following information:

1. Address, telephone number and working house of the person(s) to be contacted by the customer for the arrangement of a personal interview with an employee of the electrical utility with the authority to accept full payment or make other payment arrangements.
2. The total amount owed by the customer for electrical services rendered, the date and amount of the last payment and the date by which the customer must either pay in full the amount outstanding or make satisfactory arrangements for payment by installments of such amount.
3. The statement that service to a residential customer during the months of December through March will not be terminated where such customer, or a member of his household at the premises to which service is rendered, can furnish to the utility, no less than (3) days prior to termination of service or to the terminating crew at time of termination, a certificate on a form provided by the utility and signed by a licensed physician, that termination of electric service would be especially dangerous to such

person's health. Such certificate must be signed by the customer and state that such customer is unable to pay in full the amount of the charges due for electrical service or is unable to pay by installments. A certification shall expire on the thirty-first day from the date of execution by the physician. Such certification may be renewed no more than three (3) times for an additional thirty (30) day period each. Upon renewal of the certification, the electrical utility shall advise the customer that he may wish to call the local social service agency to determine what public or private assistance may be available to him.

4. The availability of investigation and review of any unresolved dispute by the ~~Commission~~ ORS Staff and include the ~~Commission's~~ ORS's toll free telephone number.

b. Not more than two (2) business days prior to termination of service, the electrical utility shall make reasonable efforts either by telephone or in person to contact the customers that is subject to termination of service to notify him that his service is subject to termination for non-payment. Alternatively, not more than three (3) business days prior to termination of service, the electrical utility shall notify the customer by mail that he is subject to termination of service for non-payment. The electrical utility shall maintain records of the efforts made to contact such customers. Termination of service may be delayed in case of inclement weather, emergencies or operational conflicts.

c. The electrical utility shall provide for the arrangement of a deferred payment plan to enable a residential customer to make payment by installments where such customer is unable to pay the amount due for electrical service. The deferred payment plan shall require the affected customer to maintain his account current and pay not less than 1/6 of the outstanding balance for a period not to exceed six months. The outstanding balance may include the late payment charge authorized by R.103-339(3). Service to such customer shall not be terminated unless the electrical utility has informed the customer that such deferred payment plan is available. Any agreement to extend or defer a payment cut off date by more than five work days is a deferred payment plan. If a customer fails to conform to the terms and conditions of such deferred payment plan, the electrical utility may terminate service upon three (3) days written notice, if personally delivered, or upon five (5) days notice by mail.

d. If a residential customer informs the utility that he is unable to make payment in full on his account or to make arrangements for the satisfaction of the balance of his account through a deferred payment plan, the electrical utility shall advise the customer that he may wish to call the local social service agency to determine what public or private assistance may be available to him.

e. The electrical utility shall maintain a record of all deferred payment plans established with customer subject to termination for a period of two (2) years.

f. The electrical utility shall provide a copy of the termination notice to any third party identified by the customer upon establishment of the service account or at any time thereafter.

g. Electric service maybe terminated only on Monday through Thursday between the hours of 8:00 a.m. and 4:00 p.m., unless provisions have been made for the availability of the acceptance of payment and the reconnection of service. Electric service may not be terminated on the day preceding any day on which the electric utility's collection offices are closed, unless provisions have been made for the availability of the acceptance of payment and the reconnection of service. All employees of electrical utilities assigned to terminate service shall be authorized to accept payment from customers subject to termination of service or in lieu thereof, at the utilities' option, allow such customer at least one full working day beyond the initial date set for termination the opportunity to make satisfactory arrangements on the account at the offices of the utility; provided, however, that in certain areas where it has been determined by the utility that the safety of its employees warrants it, those employees shall not be required to accept payments from customers subject to termination.

## **SUBARTICLE 5**

### **ENGINEERING**

#### **103-360. Requirements for Good Engineering Practice.**

The electric plant of an electrical utility shall be constructed, installed, maintained and operated in accordance with good engineering practice to assure, as far as reasonably possible, continuity of service, uniformity in the quality of service, and the safety of persons and property.

#### **103-361. Acceptable Standards.**

Unless otherwise specified by the Ecommission, after hearing if requested, the electrical utility shall use the applicable provisions of the latest edition, Part 2, of the "National Electrical Safety Code", as minimum standards of accepted good engineering practice.

#### **103-362. Acceptable References.**

Part 2 of the "National Electrical Safety Code" (latest edition), is considered by this Commission to be an acceptable reference.

New additions to Part 2 of the National Electrical Safety Code shall become effective six months after the date of final approval by the American National Standards Institute unless a request for a hearing has been granted by the Ecommission.

#### **103-363. Adequacy of Service.**

##### **1. Operation of Electrical Utility.**

A. Standard Frequency--Each electrical utility supplying alternating current shall adopt a standard frequency of 60 Hertz, suitability of which has been determined by the Ecommission, and shall maintain this frequency within 15 seconds plus or minus of

standard at all times during which service is supplied; provided, however, that momentary variations of frequency of more than 15 seconds which are clearly due to no lack of proper equipment or reasonable care on the part of the electrical utility, shall not be construed a violation of this rule.

B. Standard Voltage--Each electrical utility shall adopt standard average voltage for its different classes of constant voltage service. This voltage maintained at the electrical utility mains shall at all times be reasonably constant, and the variations in voltage from the average shall in no case exceed the limitations as prescribed below.

For service rendered for lighting purposes plus or minus voltage variations from the standard adopted, shall not exceed 5%. For service rendered for power or primarily for power purposes, the voltage variations should not exceed 10% above or below the standard average voltage.

A greater variation of voltage than specified above may be allowed when service is supplied directly from the transmission line or in a limited or extended area where customers are widely scattered, and the business done does not justify close voltage regulation. In such cases, the best voltage regulation should be provided that is practicable under the circumstances.

Variations in the voltage in excess of those specified, caused by the operation of power apparatus on customers' premises which necessarily requires large starting current by the action of the elements, and by infrequent and unavoidable fluctuations of short duration due to station operation, shall not be construed a violation of this rule.

C. Special Equipment--Where a separate transformer or other additional electrical utility standard equipment or capacity is to be used to eliminate fluctuations or other effects detrimental to the quality of service to other customers due to welding or x-ray equipment, etc., the electrical utility may make a reasonable charge for the transformer, equipment and line capacity required. In lieu of the above, the electrical utility may require the customer to either discontinue the operation of the equipment causing the disturbance or install the necessary motor generator set or other apparatus to eliminate the disturbance detrimental to the service of other customers.

D. When only one set of overhead service wires (service drop) is required to connect a small customer to electric service mains, the electrical utility shall provide such service drop including the attachments at the point where service drop wires are attached to customer's premises, which point shall be the point nearest the utility's electric circuit to be used in supplying service to the customer. The customer shall provide "service entrance facilities" including meter loop, entrance switch or circuit breaker, and service entrance conductors complying with rules of the utility from the point of attachment of the utility's service drop on the customer's premises. The customer shall provide a substantial point of attachment for service drop wires. This provision does not apply to large customer connections as they vary so greatly that each requires special consideration. When service to the customer requires individual electrical utility



company facilities (such as oil circuit breakers, transformers, etc.), to be located on customer's premises on the ground or in a vault, the customer shall provide a suitable, adequate and readily accessible space for such facilities and shall insure access at all times. Electrical utility property installed on a customer's premises shall remain property of the electrical utility and may be removed for testing, repairs, changes in service or other conditions justifying change or removal.

E. For substations erected to serve an individual customer, the electrical utility shall provide either suitable supports on the substation structure or a suitable structure outside and immediately adjacent to its substation property line to which the customer shall extend his facilities. The customer in addition shall install, or cause to be installed, all facilities beyond the point of delivery thus established. When required by the electrical utility, the customer shall install one set of main disconnecting switches which shall control all of the customer's load other than a fire pump circuit, if any.

F. The meter installation of the electrical utility may include enclosures that may be locked by the electrical utility and not accessible to the customer.

## 2. Voltage Surveys and Records.

A. Each electrical utility shall provide itself with suitable indicating and/or recording voltmeters, and shall make a sufficient number of voltage tests periodically so as to insure compliance with the voltage requirements cited above. These tests shall be made at appropriate points upon the electrical utility's distribution lines.

B. Each electrical utility shall have installed at its generating stations suitable instruments to indicate the frequency and voltage of the service rendered from that station, together with the load or loads demanded in each such station. Each electrical utility shall keep a station record at attended stations which shall show: (1) the time of starting and shutting down the generating units; (2) readings of such instruments as necessary; and (3) all interruptions to service affecting bus bars or distribution systems, with the time, duration, and the cause (when known) of the interruption.

## SUBARTICLE 6

### INSPECTIONS AND TESTS

#### **103-370.** Electrical Utility Inspection and Tests.

Each electrical utility shall make such tests as are prescribed under these rules with such frequency and in such manner and at such places as is herein provided or requested by the ORS or as may be approved or ordered by the Commission.

1. Periodic Tests of Meters. Each electrical utility shall test each watt-hour meter, and if necessary, recalibrate according to the following schedule:

a. Meters used with instrument transformers:

1. Polyphase meters--at least once in four (4) years.
2. Single-phase meters--at least once in eight (8) years.
  - b. Self-contained polyphase meters--at least once in six (6) years.
  - c. Self-contained single-phase and three wire network meters--at least once in eight (8) years.
  - d. Single-phase meters may be tested and calibrated in accordance with "Sample Meter Testing Plans" approved by the ~~E~~commission. Electrical utilities using a "Sample Meter Testing Plan" shall continue to advise the ~~E~~commission and the ORS of the results of the operation of the plan.

## 2. Meter Testing on Request of Customers.

- A. Each electrical utility shall, at any time (when requested in writing by a customer) upon reasonable notice, test the accuracy of the meter in use by him.
- B. No deposit or payment shall be required from the customer for such meter test except when a customer requests a meter test within one year after date of installation or the last previous test of a meter, in which case he shall be required upon request by the electrical utility to deposit the estimated cost of the test, but not to exceed \$15.00 without approval of the ~~E~~commission. The amount so deposited with the electrical utility shall be refunded or credited to the customer, if the meter is found, when tested, to register more than 2% fast or slow, otherwise the deposit shall be retained by the electrical utility.
- C. A customer may request to be present when the electrical utility conducts the test on his meter, or if he desires, may send a representative appointed by him. The electrical utility shall honor such request.
- D. A report giving the name of the customer requesting the test; the date of the request; the location of the premises where the meter has been installed; the type, make, size, and serial number of the meter; the date of removal; the date tested; and the result of the test shall be kept by the electrical utility.

### **103-371. ~~Commission~~ ORS Inspections and Tests.**

The ~~Commission~~ ORS shall make tests of meters as follows:

- a. Upon written request to the ~~E~~commission or ORS by a customer or an electrical utility, a test will be made of the customer's meter as soon as practicable.
- b. On receipt of such request, the ~~Commission~~ ORS shall notify the electrical utility, and the electrical utility shall not knowingly remove or adjust the meter until instructed by the

~~Commission~~ ORS. The ~~Commission~~ ORS shall supervise the test of the meter, using the ~~Commission's~~ rotating standard, or the ~~Commission~~ Standard with such standard being compared with the electrical utility's standard. The results of the test shall be made available to the customer.

c. The customer shall be notified of the test in sufficient time to allow him or his representative to be present.

d. The ~~Commission~~ ORS shall make a written report of the results of the test to the customer and to the electrical utility.

### **103-372. Facilities and Equipment for Testing.**

A. Each electrical utility furnishing metered electric service shall, unless specifically excused by the ~~Commission~~, provide and have available such meter laboratory, standard meters, instruments and facilities as may be necessary to make the tests required by these rules or other orders of the commission or as requested by the ORS, together with such portable indicating electrical testing instruments, watt-hour testing meters, and facilities of suitable type and range for testing service watt-hour meters, voltmeters and other electrical equipment, used in its operation, as may be deemed necessary and satisfactory to the ~~Commission~~ or the ORS.

B. All portable indicating electrical testing instruments such as voltmeters, ammeters and wattmeters, when in regular use for testing purposes, shall be checked against suitable reference standards whenever used in testing service meters of the electrical utility.

C. When the size of the electrical utility is such that it is more economical to contract for meter testing, such procedure is authorized provided the contract work is done by a recognized meter testing laboratory.

### **103-373. Test Procedures and Accuracies.**

#### **1. Method of Determining Average Error of Meters.**

A. Field testing the average error of a service watt-hour meter shall be determined as follows: The error at Light Load, here defined as approximately 10% of the rated capacity (Test Amperes) of the meter, shall be determined by taking the average of at least two errors determined from as many separate tests on the same Light Load, which error must agree within one-half percent (  $1/2$  %).

In the same manner, the error at Full Load, here defined as approximately the rated capacity (Test Amperes) of the meter, shall be determined. The average error of the meter shall then be determined by taking the average error at Light Load plus four times the error at Full Load (Test Amperes) and dividing this sum by five, proper consideration being taken of the sign of the two errors.

B. Meter Shop Testing--When an electronic test board is used, the average error of a watt-hour meter shall be determined as follows: The error at Light Load, here defined as approximately 10% of the rated capacity (Test Amperes) of the meter, shall be determined. The error at Full Load, here defined as approximately the rated capacity of the meter or Test Amperes, shall be determined. The average error of the meter shall then be determined by taking the error at Light Load plus four times the error at Full Load (Test Amperes) and dividing this sum by five, proper consideration being taken of the sign of the two errors.

## 2. Meter Accuracy.

A. Creeping: No watt-hour meter which registers on "no load" when the applied voltage is less than one hundred and ten (110) percent of standard service voltage shall be placed in service or allowed to remain in service.

B. Initial Accuracy Requirements--No watt-hour meter shall be in service which is in any way mechanically defective, or which has incorrect constants, or which has not been tested individually or under a sample meter testing plan approved by the Commission for accuracy of measurement and adjusted, if necessary, to meet these requirements at unity power factor:

Average error not over 0.5% plus or minus;

Error at Full Load (Test Amperes) not over 0.5% plus or minus;

Error at Light Load not over 1.0% plus or minus.

C. Adjustment After Test--Whenever a test made by an electrical utility or by the ~~Commission~~ ORS on a service watt-hour meter connected in its permanent position in place of service shows that the average error is greater than that specified allowed above, the meter shall be adjusted to bring the average error within the specified initial accuracy limits, or the meter shall be replaced.

## 3. Test Instruments.

Each electrical utility shall own and maintain such rotating standard watt-hour meters, such instrument transformers, voltmeters, ammeters and such other instruments necessary in maintaining the accuracy of its standards used in testing the meters serving its customers.

# SUBARTICLE 7

## STANDARDS AND QUALITY OF SERVICE

### 103-380. Quality of Service.

Each electrical utility shall provide the best possible service that can be reasonably

expected from the facilities of that electrical utility. When the quality or quantity of service falls below what can be reasonably expected, the electrical utility shall, as soon as practicable, provide the proper service.

**103-381. Interruption of Service.**

A. Each electrical utility shall make all reasonable efforts to avoid interruptions of service, but when interruptions occur, service shall be re-established within the shortest time practicable, consistent with safety of its employees, customers, and of the general public.

B. Planned interruptions shall be made at a time that will not cause unreasonable inconvenience to customers and shall be preceded by a reasonable attempt to give adequate notice to those who will be affected.

**103-382. Restrictions on the Use of Service.**

A. The electrical utility may impose reasonable restrictions on the use of electric service during periods of shortage of supply, excessive demand or other difficulty which jeopardizes the supply of service to any group of customers.

B. The electrical utility may impose reasonable restrictions on the use of electric service by customers who create conditions which prevent the electrical utility from supplying satisfactory service to that customer, or to other customers.

C. If an electrical utility finds that it is necessary to restrict the use of electric service, it shall notify its customers and give the Commission written notice, except in emergencies, before such restriction becomes effective. Such notification shall specify:

1. The reason for restriction.
2. The nature and extent of the restriction, i.e., amount and time of use by certain classes of customers, etc.
3. The date such restriction is to go into effect.
4. The probable date of termination of such restriction.

D. The electrical utility shall not be required to furnish service to customers whose equipment is operated in such manner as to cause unreasonable voltage fluctuations on the electrical utility's circuits, which fluctuations are detrimental to service to other customers.

**103-383. Special Tests.**

The electrical utility shall conduct such special and regular tests of its generating

transmission and distribution plant as will enable the electrical utility to provide the best service possible at the most reasonable cost to the customers of the electrical utility.

## **SUBARTICLE 8**

### **SAFETY**

#### **103-390. Acceptable Standards.**

As criteria of accepted good safety practice of the electrical utility, the ~~C~~commission shall use the applicable provisions of the standards listed in 103-361.

#### **103-391. Protective Measures.**

A. Each electrical utility shall exercise reasonable care to reduce the hazards to which its employees, its customers and the general public may be subjected.

B. The electrical utility shall give reasonable assistance to the ~~Commission~~ ORS in the investigation of the cause of accidents and shall give reasonable assistance to the commission and the ORS in the determination of suitable means of preventing accidents.

C. Each electrical utility shall maintain a summary of all reportable accidents arising from its operations. (See 103-315.)

#### **103-392. Safety Program.**

Each electrical utility shall adopt and execute a safety program, fitted to the size and type of its operations. As a minimum, the safety program should:

- a. Require employees to use suitable tools and equipment in order that they may perform their work in a safe manner.
- b. Instruct employees in safe methods of performing their work.
- c. Instruct employees who, in the course of their work, are subject to the hazard of electrical shock, asphyxiation, or drowning, in accepted methods of artificial respiration.
- d. Establish liason with appropriate public officials, including fire and police officials in anticipation of a potential emergency.
- e. Establish an educational program to enable customers and the general public to recognize and report an electrical emergency to the appropriate officials.